

## CLAIMS

1. An automatic sampler (AS) of the type functionally associable with at least two instruments (GC1 and GC2) for chromatographic analysis and with at least one plurality of containers (V) of samples (S)  
5 to be subjected to chromatographic analysis, characterized in that it can be interfaced with two or more independent data systems for data acquisition and processing, and for the control/management of said automatic sampler.
2. An automatic sampler according to claim 1, characterized in  
10 that said instruments (GC1 and GC2) for chromatographic analysis are gas chromatographs and/or liquid chromatographs.
3. An automatic sampler according to any of the previous claims, characterized in that two or more distinct interfaces are provided for interfacing with said two or more data systems (DS).
- 15 4. An automatic sampler according to claim 3, characterized in that said interfaces are of the RS-232, Ethernet TCP/IP LAN, IR, or Wireless type.
5. An automatic sampler according to any of the previous claims, characterized in that said data systems include one or more  
20 computers.
6. An automatic sampler according to any of the previous claims, characterized in that two or more interfaces are provided for interfacing with each of said instruments (GC1 and GC2) for chromatographic analysis.
- 25 7. An automatic sampler according to claim 6, characterized in that said two or more interfaces allow the transmission of interfacing logic signals between said at least two instruments and said sampler, so as to enable their synchronization.
8. A method for the acquisition and/or processing of data

regarding the chromatographic analysis of samples (S) via the control of an automatic sampler (AS) according to claim 1, including the steps of:

- definition of a first sampling sequence on a first (DS1) of said two  
5 or more independent data systems (DS).
  - definition of a second sampling sequence on a second (DS2) of said two or more independent data systems (DS).
  - definition of an nth sampling sequence on an nth (DSn) of said two or more independent data systems (DS).
  - 10 - activation of said automatic sampler (AS) by said first data system (DS1), according to said first sampling sequence, for feeding said samples (S) to a first instrument (GC1) for chromatographic analysis, or, in a separate manner, by said second data system (DS2), according to said second sampling sequence, for feeding said  
15 samples (S) to a second instrument (GC2) for chromatographic analysis, or by said nth data system (DSn), according to said nth sampling sequence, for feeding said samples (S) to an nth chromatographic analysis instrument (GCn).
9. A method according to claim 8, characterized in that a further  
20 step is included:
- acquisition and/or processing of data regarding the chromatographic analysis of said samples (S), said data being obtained with said first, with said second or with said nth sampling sequence from said first (GC1), said second (GC2) or said nth (GCn)  
25 chromatographic analysis instrument.
10. A method according to claim 8 or claim 9, characterized in that a further step is included:
- reading of the code associated with the containers (V) of said samples (S), via a code reader (BCR) of said automatic sampler (AS).

11. A method according to any of the claims 8 to 10, characterized in that for each of said samples (S) analyzed by one of said instruments (GC1, GC2, GCn) for chromatographic analysis, the data regarding the chromatographic analysis and/or the operational data regarding  
5 said automatic sampler (AS) and said instruments (GC1, GC2, GCn) for chromatographic analysis and/or the sampling sequence set up for said analysis, are acquired.